

Title (en)
DROUGHT TOLERANT PLANTS

Title (de)
TROCKENRESISTENTE PFLANZEN

Title (fr)
PLANTES RÉSISTANTES À LA SÉCHERESSE

Publication
EP 2640182 A4 20140507 (EN)

Application
EP 11841328 A 20111115

Priority
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• AU 2011001478 W 20111115

Abstract (en)
[origin: WO2012065219A1] The present specification teaches the generation of drought tolerant plants. The present disclosure enables manipulation of a phenotypic characteristic referred to herein as "stay-green" to generate drought tolerant plants by recombinant, mutagenic and/or breeding and selection methods. Plant management practice systems to increase crop yield and harvest efficiency in water-limited environments are also taught herein.

IPC 8 full level
A01H 4/00 (2006.01); **A01H 1/04** (2006.01); **A01H 5/10** (2018.01); **C07K 14/415** (2006.01); **C12N 15/05** (2006.01); **C12N 15/29** (2006.01); **C12N 15/82** (2006.01)

CPC (source: EP US)
A01H 1/04 (2013.01 - EP US); **A01H 1/1225** (2021.01 - EP US); **A01H 5/10** (2013.01 - EP US); **C07K 14/415** (2013.01 - EP US); **C12N 15/00** (2013.01 - EP US); **C12N 15/8261** (2013.01 - EP US); **C12N 15/8266** (2013.01 - EP US); **C12N 15/8273** (2013.01 - EP US); **Y02A 40/146** (2017.12 - US)

Citation (search report)
• [X] WO 2007011771 A2 20070125 - BASF PLANT SCIENCE GMBH, et al
• [X] WO 03008540 A2 20030130 - SYNGENTA PARTICIPATIONS AG [CH], et al
• [A] WO 2004050873 A1 20040617 - UNIV HONG KONG [CN]
• [Y] FELTUS F A ET AL: "Alignment of genetic maps and QTLs between inter and intra-specific sorghum populations", THEORETICAL AND APPLIED GENETICS ; INTERNATIONAL JOURNAL OF PLANT BREEDING RESEARCH, SPRINGER, BERLIN, DE, vol. 112, no. 7, 1 May 2006 (2006-05-01), pages 1295 - 1305, XP019322252, ISSN: 1432-2242, DOI: 10.1007/S00122-006-0232-3
• [YD] KEBEDE H ET AL: "Quantitative trait loci influencing drought tolerance in grain sorghum (Sorghum bicolor L. Moench)", THEORETICAL AND APPLIED GENETICS, vol. 103, no. 2-3, August 2001 (2001-08-01), pages 266 - 276, XP002722214, ISSN: 0040-5752
• [Y] CHENJIA SHEN ET AL: "Expression profile of PIN, AUX/LAX and PGP auxin transporter gene families in Sorghum?bicolor under phytohormone and abiotic stress", FEBS JOURNAL, vol. 277, no. 14, 2 June 2010 (2010-06-02), pages 2954 - 2969, XP055069181, ISSN: 1742-464X, DOI: 10.1111/j.1742-4658.2010.07706.x
• [A] MADHAVI LATHA A ET AL: "Development of transgenic pearl millet (Pennisetum glaucum (L.) R. Br.) plants resistant to downy mildew", PLANT CELL REPORTS, SPRINGER, BERLIN, DE, vol. 25, no. 9, 11 April 2006 (2006-04-11), pages 927 - 935, XP019423765, ISSN: 1432-203X, DOI: 10.1007/S00299-006-0141-6
• [A] J.-R. WANG ET AL: "Expression of PIN Genes in Rice (Oryza sativa L.): Tissue Specificity and Regulation by Hormones", MOLECULAR PLANT, vol. 2, no. 4, 1 July 2009 (2009-07-01), pages 823 - 831, XP055109517, ISSN: 1674-2052, DOI: 10.1093/mp/ssp023
• See references of WO 2012065219A1

Designated contracting state (EPC)
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EA 201390724 A1 20140530; EP 2640182 A1 20130925; EP 2640182 A4 20140507; EP 2640182 B1 20180725; EP 3434099 A1 20190130;
ES 2692857 T3 20181205; HU E040165 T2 20190228; MX 2013005485 A 20130926; MX 352184 B 20171109; PL 2640182 T3 20190228;
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